

A. Control Measure under Consideration	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
11 South Carolina State Measures							
Comments: Modeling for 2007, shows attainment without including measures beyond national and regional measures already finalized.. 2012 and 2017 also shows attainment.							
11 Appalachian, SC (Effective date of nonattainment designation deferred) - Anderson County							
Truck Stop Electrification Project	51 spaces outfitted with Idle Aire Technology	On-going.	February 2005	1,836 tons/year	36.21 tons/year	State Grant	CO reductions 15.3 tons/year December 2004 EAC SIP - Appendix 16 December 2004 Progress Report June 2005 Progress Report
School Bus Retrofit Project	Approximately 23 diesel buses will be retrofitted particulate filters during 2006. (additional reductions of PM are also expeted)	On-going.	2006	391 lbs/year	N/A	N/A	CO reductions 2,737 lbs/year December 2004 EAC SIP - Appendix 16
Gas Can Exchange Project	On September 10, 2005, Anderson County in conjunction with SC DHEC and several corporate sponsors such as Michelin, Wal-Mart and Sonic, held a gas can exchange for the residents of Anderson County. Anderson County intends to periodically hold these events throughout the county to promote the use of ventless gas cans.	83 gas cans that vents VOC into the atmosphere were traded in for ventless gas cans		355 lbs/year	N/A	N/A	
<p align="center">DECEMBER 2005 PROGRESS REPORT FOR ANDERSON COUNTY</p> <p align="center">Based on stakeholder consultation and taking into consideration resource and political constrains, the following control measures are under consideration pending modeling that demonstrates compliance in 2007 by SCDHEC. It is anticipated these measures under consideration will assist the County of Anderson, Greenville, Spartanburg, South Carolina, in achieving and/or maintaining the 8-hour ozone standard by 2007.</p>							
Air Quality Awareness and Improvement Policy	Memorandum sent to all County departments for the purpose of establishing certain principles that will guide the recurring activities of County government. Purpose of policy is to establish certain principles that will guide the recurring activities of Anderson County government. 1. Encourage employee car-pooling opportunities, when feasible, especially when travel in County vehicles is involved. 2. Purchase the lowest-emission vehicles practical to meet County needs. This may include the purchase of Tier II compliant vehicles, alternative fueled vehicles or hybrids. It is the goal of this county, that where practicable, to purchase hybrid or AFV's when conditions warrant and allow. 3. Ensure that all County vehicles and equipment are operating according to the manufacturer's specifications. 4. Restrict vehicle idling to no more than 5 minutes. Exceptions include emergency vehicles, traffic/weather conditions, and vehicles being repaired, maintained, or inspected. 5. Where feasible and practicable, restrict mowing and use of gas powered lawn equipment on County property on Ozone Action Days. 6. Restrict all County-sponsored outdoor burning on Ozone Action Days. 7. Practice energy conservation in all County facilities. The County will set a goal of reducing energy use by encouraging the w 8. Include environmental considerations in purchasing decisions for goods and services. An example of such would be to purch 9. Departments are encouraged to Refuel vehicles where possible at times of the day that will have the least impact on ozone le SEE Comment #6	On-going.	Effective immediately - October 12, 2004	N/A	N/A	N/A	The commitment to address these activities has been assured by the County Administrator by establishing the Air Quality Awareness and Improvement Policy for County Government. 1. See comment #6.
1. Support SCDHEC statewide efforts to reduce ozone levels.	Stakeholder group to support and participate in modeling efforts. Develop stakeholder group to participate in development of regulations (NOx - BACT (Best Available Control Technology Economically Achievable), restrict open burning).	December 2004 EAC SIP did include Appendix 16 - 1. SC61-62.2 "Prohibition of Open Burning" regulation with reductions for 2007 calendar year - reductions expected during the ozone season for residential construction waste 2. SC61-62.5, Std. 5.2 "Control of Oxides of Nitrogen) reduction amount for both existing and new sources combined across Anderson, Greenville, Spartanburg for 2007 calendar year June 24, 2004 - Participated in Upstate Air Quality Steering Committee meeting held at BMW. See Comment #4.	1. June 25, 2004 2. June 25, 2004	28.04 tons/season N/A	5.90 tons/season 234.1 tons/yr	N/A	See Comments #1, #2, #3, #6
2. Designate an Ozone Action Coordinator	Designate a staff person in each County who will be responsible for coordination of counties ozone programs	On-going.	March 2003	N/A	N/A	N/A	
3. Seek low sulfur fuels as early as possible	Continue to coordinate with representatives of colonial and Plantation pipelines, refiners, and State representatives to ensure that the upstate has the opportunity to receive low sulfur fuels at the earliest date as they can be provided.	On-going.	On-going.	N/A	N/A	N/A	
4. Design and implement congestion management and Intelligent Transportation System (ITS) measures.	Implement congestion management projects: intersection and signalization improvements to alleviate traffic congestion, therefore, reducing emissions from idling vehicles; Implement Intelligent Traffic Systems such as automated advisory/alert messages to drivers on interstate highways. For example: advise motorist about an accident ahead and the use of alternate routes to avoid congestion, which minimize emissions from idle vehicles. Encourage and support improved traffic operational planning, engineering and maintenance for existing and future transportation infrastructure.	County in the process of implementing congestion management plan on several major thoroughfares; cameras and variable message boards have ben installed on I-85 through Anderson, Greenville and Spartanburg Counties. Anderson County Council, at its December 6, 2005 meeting, passed a resolution creating a committee to investigate capital funding projects for roads and bridges; within that commission, they will also be looking at funding for projects to relieve congestion on county roads and the addition of bike lanes on county roads. Report will be completed by July 2006.	On-going.	N/A	N/A	N/A	

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5. Use of hybrid vehicles	Encourage people, public and private organizations to purchase hybrid vehicles as they replace vehicles/fleet Encourage that 10% of public agencies fleet have hybrid vehicles (use of hybrid vehicles does not require changes in infrastructure for dispensing fuel). Encourage public agencies to require purchasing hybrid electric vehicles (HEVs) through the State vehicle contract.	June 2005 Progress Report - countywide resolution to purchase cars alternatively fueled or hybrid vehicles.	On-going.	N/A	N/A	N/A	
6. Use higher efficiency engines for school buses	Require purchase of high efficiency engines for school buses as they are replaced. In South Carolina, the SC Department of Education is in charge of maintenance of school buses. DHEC is working with SC Department of Education to obtain grants from EPA. Promote an Adopt-A-School-Bus Program. Endorse a statewide recommendation for the State to take the lead	In 2006, approximately 47 diesel buses will be retrofitted with particulate filters, which will create additional PM reductions.	On-going.	N/A	N/A	N/A	Reductions accounted for under School Bus Retrofit Project
7.a. Develop incentive programs and opportunity for citizens to choose alternative transportation modes. Establish intermodal connections with an emphasis on mass transit	WALKING/BIKING Encourage local government to increase pedestrian/bicycle infrastructure spending (the Upstate spends 2 cents per person compared to SC spending 22 cents per person). Establish safer bike routes with better signs marking lanes and routes. Increase highway funding for bike paths, walking or mass transit including high-speed rail. Support the federal transportation enhancement program. Install bike racks on all transit vehicles to encourage intermodal transportation. New buses purchased through the state's bus purchase program will have bike racks. PARK and RIDE Establish mass transportation between a plant and a park-and-ride site. CARPOOLING Work with local government to offer incentives employees to car pool. MASS TRANSIT Offer a free trolley service running in a loop in downtown areas and nearby restaurants, especially during lunch hours; Research past feasibility studies on free downtown shuttles. Potential for sponsorship with local area restaurants and businesses for a lunch time shuttle could defer the operational costs of the endeavor. Support mass transit (transportation choices and alternatives): While the only local mass transit choice that is currently available is the transit bus, example of future options such as bus rapid transit, commuter passenger service offered by trains on existing rail systems, a diesel multiple unit or "light rail" should be supported.	On-going.	On-going.	N/A	N/A	N/A	
7.b. Offer free or reduced transportation cost on high ozone days.	MASS TRANSIT: Implement a coordinated high ozone day alert action plan to include public notification and free or reduced ozone fares from the transportation providers.	On-going.	On-going.	N/A	N/A	N/A	
7.c. Reduce vehicle miles traveled by developing efficient user-friendly transit systems.	Integrate transportation planning with land use planning so public transit can make a comprehensive contribution to economic development and mobility; Remove local barriers to densification in downtowns, infill areas, and transit stations and corridors.	On-going.	On-going.	N/A	N/A	N/A	
8. Review and update air emission inventory for the Upstate	Ensure all industrial sources still operating. Review industrial sources for plant closures. Identify major sources of NOx Map the locations of point sources (10% of point sources cannot be found). Map the specific locations and the area sources where coal is burned.	On-going.	On-going.	N/A	N/A	N/A	SCDHEC
9. Support SCDHEC in evaluating and seeking reductions from major sources based on modeling	Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plant Coordinate with the Williams Company to determine what NOx reductions are planned for the TRANSCO Pipeline. Support NOx reduction strategies in the State Implementation Plan Develop an Early Reduction Program with incentives for industrial facility (Tier Two Type emissions NOx sources)	See info on Duke Power included in Appendix 16 of EAC SIP (link in Comment #6)	On-going.	N/A	40%	N/A	
10. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers).	Use funds generated from a license plate sales, registration fees, or license plate tax program to buy or repair high emitting vehicles from individuals. Purchase such vehicles from non-profit groups such as the Kidney Foundation, Goodwill, Salvation Army when they have been donated as charitable gifts. Consider accelerated vehicle retirement (scrappage) programs to encourage vehicle owners to voluntarily retire their vehicles sooner than they would have otherwise.	No action took place on this item in 2005.	On-going.	N/A	N/A	Use funds from license plate sales	
11. Ban open burning of on-site commercial clearing debris during ozone season (April - October)	Use SCDHEC model to determine the most effective method to ban open burning. Discuss modeling results with all local governments to consider adoption.	DHEC encourages Anderson, Greenville, and Spartanburg to actively notify all residents that the statewide ban is now in force and violations are punishable by law. See Comment #6.	On-going.	N/A	N/A	N/A	
12. Create incentives for the purchase of high efficiency and low emissions vehicles.	Offer tax credits for vehicles with high efficiency gas consumption or low emissions. Offer tax credits for low mileage vehicles instead of high mileage vehicles	December 2004 - developing draft bill to offer reduced tax incentives for those purchasing low emitting vehicles. See Comment #5.	On-going.	N/A	N/A	N/A	
****Develop air quality best management practices (BMPs)_ for construction sites	Develop a generic list of BMPs Develop management practices for construction debris. Develop management practices for emissions from construction vehicles. Develop management practices for traffic controls during construction.	A bill titled; An act concerning the promotion Of alternative use fuel, and hybrid propulsion System For transportation purposes was submitted to the SC House of representatives in January 2005. The bill is now in committee. In summary, the bill provides tax credit for vehicles using alternative fuel or hybrid propulsion vehicles. The credit is allowed against the tax imposed by for the purchase of vehicles licensed in South Carolina which use, or which are converted within 120 days of purchase to use, clean-burning fuel. Specifically the intent of the bill will apply for income tax years beginning on or after January 1, 2004, but prior to January 1, 2013. The tax credit will be allowed for the purchase of an alternative fuel or hybrid propulsion vehicle, and for a motor vehicle that is converted to use alternative fuel, for the replacement of the power source with a power source that uses alternative fuel	On-going.	N/A	N/A	N/Anot included in March 2004 submittal was included in December 2003....

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13. Use land-use and transportation planning to improve air quality	Include air quality measures as a part of the land-use and transportation planning process.	On-going.	On-going.	N/A	N/A	N/A	
14. Implement a program to encourage use of green power.	Capture emissions from landfills to produce green power, e.g., BMW is utilizing Palmetto Landfill emissions to produce energy for its plant. Implement a Purchase Green Power program when available. Green power is electricity generated by renewable resources like solar, wind, and even decomposing garbage in selected landfills. These resources are replenished naturally and minimize harm to the environment.	In 2005, Blue Ridge Electric Cooperative in Anderson County has begun offering the purchase of "Green Power" to its members. The Green Power is Generated by Santee Cooper, who is the source of power for all of the electric cooperatives in South Carolina. Santee Cooper will construct a Green Power station at the Anderson Regional Landfill that will enter commercial operation in 2006.	On-going.	N/A	N/A	N/A	Please go to http://www.santeecooper.com/greenpower/newsroom/newsletters/gpn_ews_fall2005.pdf for the Fall newsletter and http://www.santeecooper.com/greenpower/newsroom/letters.html for the "Green Power" newsletter.
15. Promote route efficiency for delivery vehicles, trash collection etc.	Encourage business to consolidate distribution and collection routes to improve efficiency and reduce emissions from their fleets. Maximize route efficiency for public services such as garbage collection, delivery vehicles, and other vehicle trips to reduce fuel usage.	No action took place on this item in 2005.	On-going.	N/A	N/A	N/A	
16. Establish a clean air partnership with business and industry.	Encourage and coordinate alternate work schedules such as staggered work hours for business, industry and local governments. Establish park and ride lots serving perimeter counties along major corridors. Make the public aware of the park-and-ride concept: media could assist in publicizing which programs are available. Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicle to work. Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc. Encourage telecommuting. Adopt a Bus Program. Develop funding to be used for matching grants fund for several EAP strategies. Develop a core competency and assisting the Upstate EAP group in writing grant proposal.	Michelin North America, on November 29, 2005 announced that their two Anderson County plants have qualified for membership in the National Environmental Performance Track program. They are among 350 facilities nationwide that have met the stringent requirements. Michelin is also investing \$80 million to expand and upgrade the two plants to reduce environmental impacts within Anderson County. Duke Power has agreed to reduce the idling time for their vehicles during ozone season. During ozone season, all vehicles will not idle for more than 30 seconds before the vehicle is shut down. With the 88 diesel trucks and 265 gasoline trucks in use in Anderson County, that equates to a reduction of 530 pounds VOC reduced and 765 pounds NOx reduced during ozone season.	On-going.	530 lbs/year	765 lbs/year	N/A	http://greenvilleonline.com/apps/pbcs.dll/article?AID=/20051129/BUSINESS/511290340
17. Establish an active public awareness campaign	Develop an editorial board to discuss air quality issues and development of a relationship with media. Use alert messages year round, not only during ozone season; Utilize public service announcement, newspapers, weather channels, and other media outlets to notify citizens of high ozone days; Utilize TV Channels to issue high ozone alerts using the crawl bar at bottom of TV screens. Encourage health organizations to sponsor ozone alerts in media. Enhance ozone awareness (Outreach-communication): assign a local agency to develop and implement a program to educate and motivate individuals to take actions to minimize ozone pollution. Includes a focused distribution of educational materials, dissemination of SCDHEC ground-level ozone forecast, increased media alerts to specific audiences, and includes action oriented components (i.e. ridesharing, telecommuting, etc.). Develop a campaign to encourage things such as refueling vehicles during evenings, not topping off tanks when refueling, using lawnmowers during evenings instead of during high ozone hours, using of electric lawn mowers. Develop a license plate program to generate revenue to implement the public awareness campaign. Develop awareness program on tax savings for purchasing high efficiency vehicles.	June 2004 Progress Report - Ozone-No-zone - local education program collaboration between Keep America Beautiful of Anderson County and Anderson County Environmental Services Division December 2004 Progress Report - sidewalk projects 4-U Transit system connecting Anderson, Pendleton, Clemson and Central; Anderson's Electric City Transit "FARE Free" program; light rail project; Tree legacy program, Tree I.D. program; Arbor Day plantings; City of Iva continual member of "Tree City USA" June 2005 Progress Report - Ozone Awareness Week; also in planning stage for gas can exchange event (September 10, 2005) December 2005 - As stated above, County held a gas can exchange program, taking in 83 old cans.	On-going.	N/A	N/A	N/A	
18. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality.	Establish programs to research energy efficiencies at local universities, e.g., Institute for Energy Studies at Clemson University. Encourage business and industry to utilize the research from these programs to make the best decision concerning the purchase or upgrade of furnaces and boilers.	ALTERNATIVE FUELS: In 2005, Clemson University Chemical engineering professor Mark C. Thies received an \$856,000 award from the Department of Energy (DOE) to develop more efficient processes for the centralized production of hydrogen by splitting water. The award was one of only three made nationwide under DOE's Nuclear Hydrogen initiative. In addition to Thies, the project team includes fellow Clemson David Bruce, John O'Connell from the University of Virginia and Max Gorensek from Savannah River National Lab. The Clemson team will interact not only with U. S. engineers and scientists but also with those in France, Italy, and Japan, all of whom have teams working on related processes. Clemson University is developing the International Center for Automotive Research (Clemson-ICAR) in Greenville, SC. The ICAR project will be the premier automotive and motorsports research and educational center in SC. Research will emphasize development of innovative materials and processing technologies, which will enable the development of more efficient and environment friendly vehicles, as well as	On-going.	N/A	N/A	N/A	

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19. Use of alternate fuels.	Direct local Planning Commissions to identify areas where alternative fuels will be best suited. Encourage the use of alternate fuels; Assist with establishing alternative fuel infrastructure for private sector clean fuel fleets. Fuels other than gasoline and diesel that are used to power on-road vehicles. Examples of alternate fuels include bio-diesel, electricity, ethanol, hydrogen, liquefied petroleum gas, methanol, and natural gas. Encourage a clean-fuel fleet program for centrally fueled fleets of more than 10 vehicles. Anderson county owns 37 alternative fuel vehicles and purchased 1,520 gallons of biodiesel in 2004.	ALTERNATE FUELS: In 2005, Clemson University Professor James G. Goodwin, Jr., chair of the Clemson's chemical and biomolecular engineering department, received a DOE grant for energy research through DOE's State Technologies Advancement Collaborative. Goodwin's work focuses on the performance of iron-based bimetallic catalysts that are crucial to synthesis of clean fuels, additives and lubricants derived from coal and biomass gasification. Clemson will lead a partnership that includes Louisiana State University, the S.C. State Energy Office, the Louisiana State Energy Office, North Carolina's Research Triangle Institute, Rentech and Sud-Chemie Inc. This grant reflects \$875,499 in DOE-STAC funds and \$294,499 in cost sharing by the industrial and governmental participants. Anderson County is presently applying for a grant from the EPA to fund a E85 gasoline pump at a gas station within Anderson to promote alternative fuel usage within the county.	On-going.	N/A	N/A	N/A	
20. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes.	Evaluate use of HOV on three (3) lane interstate highways; Show the advantages of designating HOVs; Pass laws establishing regulations on HOVs lanes such as the threshold in the number of passengers (perhaps two) in the vehicle using HOVs lanes and time of day for the lane to be designated as HOV (rush hour). Pass laws authorizing issuance of tickets for violations of HOVs lanes regulations, i.e., one-passenger vehicles using HOV lanes on designated hours.	Traffic engineers with SCDOT indicate that because traffic volumes on I-85 exceed 100,000 vehicles daily on the 3 lanes of the interstate it would be unwise to convert one of the three lanes to a HOV lane. The offsetting increase in congestion in the two remaining lanes would predictably increase NOx emissions by an amount exceeding the any reductions gained from traffic moving in the HOV lane. HOV lanes work best when they are paralleled by at least 4 or more free flow lanes. No further actions are planned.	completed	N/A	N/A	N/A	
21. Modify speed limits for optimum fuel efficiency.	Direct SCDHEC and SCDOT to take the lead role. Direct Planning Commissions to assist SCDHEC in modeling.	The ANATS MPO was designated as urban by the US Census following the 2000 census and as a result speed limits on the interstate highways in Anderson County has been established at 60 mph. No further action is planned.	completed	N/A	N/A	N/A	
22. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions.	Study impact of post construction traffic flow. Study impact of construction activities.	On-going.	On-going.	N/A	N/A	N/A	
23. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods	Eliminate minimum acreage requirements for school sites. Cap student populations per facilities. Require coordination among school boards and local governments to plan school sites and avoid conflicts with local planning goals. Favor restoration and construction of community-based small schools over new construction of remote mega schools.	On-going.	On-going.	N/A	N/A	N/A	
24. News release, PSA, and web page awareness tools	Comments #7 and 8	On-going.	On-going.	N/A	N/A	N/A	
Comments: 1. December 2004 - SC EAC SIP - activity not quantified for several reasons (first) in accordance with EAC Protocol, after all adopted Federal and State controls were accounted for in the modeling, it was determined that local controls were not necessary to demonstrate attainment of the 8-hour ozone standard. Measures were submitted by the local areas to show their continued support and commitment to the EAC process. (second) this activity is directionally sound and should provide air quality benefits and in some cases measurable results. The progress toward implementing this activity and the benefits derived will be documented as a part of the ongoing reporting requirements. 2. December 2003 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac.html - additional information provided by the county to include "findings", "advantages/disadvantages", "recommendations", "costs", etc.... 3. March 2004 - Local Early Action Plan - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0304.asp 4. June 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0604.asp 5. December 2004 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_1204.asp 6. December 2004 - SC EAC SIP - Including Appendix 8 (Local Early Action Plans and the Air Quality Awareness and Improvement Policy) and Appendix 16 (County Level Emission Reductions and Descriptions for the Ozone EAC Areas) - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 7. April 20, 2005 - Correspondence to Mr. Palmer including clarifying supplemental information to the EAC SIP submittal of December 2004. - See - http://www.scdhec.gov/eqc/baq/html/eap_sip.html 8. June 2005 - Progress Report - See - http://www.scdhec.gov/eqc/baq/html/eap_dpr_eac_0605.asp							